

REMARKS

Reconsideration of the present application is requested.

The present invention pertains to an on-demand power-operated door apparatus of the type in which a door can be swung open by a motor-driven linkage, or it can be manually opened independently of the linkage. The invention provides that type of door with a number of advantageous features. Firstly, the motor-driven linkage is returnable from a position corresponding to the door's passage-opening position to a position corresponding to the door's passage-closing position independently of the door (the linkage is preferably returned by a spring, or alternatively by the motor if it is reversible). Thus, the force of the door-closing spring need not be of a strength strong enough to also move the motorized mechanism which drives the linkage. Since a user must overcome the force of such a door-closing spring when manually opening the door, the door is easier to open than would be the case if a stronger door-closing spring had to be used in order to return the motorized linkage.

Secondly, the door can be manually opened regardless of the location of the linkage between its door-closing and door-opening positions. That is, regardless of whether the door is in a partially-open or partially-closed state during operation of the motor-driven linkage, it can still be manually swung open if desired. This feature is evident from Fig. 8 showing how the door and the linkage are independently swingable even with the linkage in an intermediate position.

Those features are embodied in the invention defined by new claim 11 which recites that the motor-driven linkage is returnable independently of the door, and that the door is manually swingable to the passage-opening position regardless of the

location of the linkage between its first and second positions (i.e., the positions corresponding respectively to the door's passage-opening and passage-closing positions). The prior art does not disclose or suggest the combination of features recited in claim 11.

The *Nyenbrink* patent discloses a door which can be opened independently of a motor-driven linkage 37. However, once the door has been opened, the motor is deactivated, so the linkage must be returned by the door under the action of a door closer 14 attached to the door (see *Nyenbrink*, beginning at column 3, line 59). That means that the closing force generated by the spring of the door closer 14 must be strong enough to overcome the opposition created by the mechanical elements of the motor mechanism that are attached to the linkage 37. Since that closer spring would oppose the manual opening movement of the door, it means that the force which the user must apply to manually open the door is increased accordingly. That is not the case in the invention defined by claim 11 which recites that the motor-driven linkage is returned independently of the door.

The *Rohroff* patent has been employed as a teaching reference for teaching how to make a door openable independently of a motorized linkage. The solution taught by *Rohroff* includes providing a motor-driven linkage 24, 48, 64, and a bracket 70 on the door which defines a channel 80 to slidably guide a door-engaging cam 64 of the mechanized linkage. It is thus apparent that the door-opening linkage cannot be returned independently of the door as recited in claim 11 since the cam 64 would be trapped within the channel 80 as the door is being closed.

Furthermore, when the power mechanism of *Rohroff* is in any position other than a passage-closing position, i.e., when the door is in the process of being

opened or closed by the power mechanism, any attempt to manually open the door would be opposed by contact between the bracket 70 and the cam 64. A user wanting to manually open the door as it is being returned would have to wait until the door has virtually reached its closed state wherein the cam 64 moves out of the bracket's channel. In contrast, claim 11 recites that the door is swingable to the passage-opening position regardless of the location of the motor-driven linkage between its first and second positions (i.e., the positions corresponding to the door's passage-closing and passage-opening positions, respectively). Thus, a user can manually open the door regardless of the position of the door or the linkage.

Accordingly, it is evident that none of the references applied against the present claims even remotely envisions or suggests an apparatus having the combination of features defined by claim 11.

Dependent claim 14 sets forth that the door comprises a balanced door and recites the upper and lower hinge arms as well as the arrangement of the fixed and movable vertical axis of rotation. Claim 14 also recites that the linkage is disposed along a region disposed between the movable hinge axis and a second vertical edge of the door, i.e., the left edge shown in Fig. 5. Consequently, when the first vertical edge of the door swings inwardly (rather than outwardly) as the door is opening, that first vertical edge will not abut and push the linkage inwardly. Neither of the *Nyenbrink* and *Rohroff* patents discloses a balanced door. If *Nyenbrink's* structure were employed in a balanced door, the first (hinged) edge of the balanced door would abut the linkage 37 as the door is being opened, and thus would push the free end of the linkage away from the door, thereby preventing the door from opening further. Likewise, if a balanced door were employed in *Rohroff*, the first (hinged)

edge of the door would abut the motor 88 as the door is being opened. Accordingly, it is not seen that one of ordinary skill in the art having before him the admitted prior art of Figs. 1-4 and the *Nyenbrink* and *Rohroff* patents would find it obvious to apply the *Nyenbrink* and *Rohroff* concepts in combination with a balanced door. Thus, it is; submitted that claim 14 distinguishes patentably over the cited prior art.

The description has been amended to provide antecedent basis for language used in claim 14.

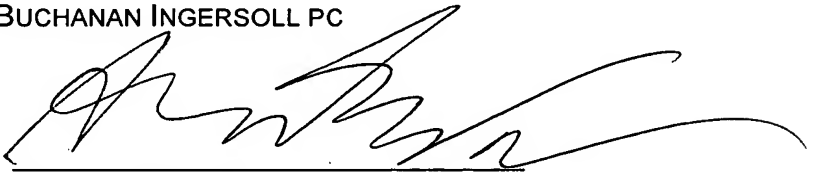
In light of the foregoing, it is submitted that the application is in condition for allowance.

Respectfully submitted,

BUCHANAN INGERSOLL PC

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By:

A handwritten signature in black ink, appearing to read 'Alan E. Kopecki', written over a horizontal line.

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